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# Innovation Call for Proposals 2023 Guidelines

EIT FOOD

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[eitfood.eu](http://eitfood.eu)

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# 1. Introduction to EIT Food Calls for Proposals

## Who are we?

EIT Food is the world's largest food innovation community, creating connections right across the food system. Supported by the EU, we invest in projects, organisations and individuals who share our goals for a healthy and sustainable food system.

## Why do we do competitive funding calls?

If you've got an innovative project that will create positive change in the food system, we want to help. We're looking for projects that will put new products on the market, introduce new and improved commercial processes and services, and achieve:

**Healthier Lives Through Food**

**A Net Zero Food System**

**A Fully Transparent, Fair and Resilient Food System**

We can provide funds of up to 70% of your project costs to de-risk your investment, leaving you free to focus on finishing rather than funding.

## Who can apply?

Legal Entities from EU Member States or [states associated to Horizon Europe](#). See specific eligibility criteria below.

You don't have to be a partner or member of EIT Food to apply for funding. We'll provide you with access to our online community to help build your consortium if, or when, you decide to apply for funding.

If you wish to become a member of EIT Food partnership, you'll gain access to a valuable source of expertise and potential collaborators to work with

## How does the funding work?

### During the Activity – Our Funding for You

As long as you can demonstrate your ability to fund 30% of your project costs from other sources, we can reimburse up to 70% of your project costs for **Innovation Challenge** Activities. There are rules around which costs are allowed and how you can claim them.

### After the Activity– Giving Back to the EIT Food Community

In return for our funding, we ask you to give a commitment that, if your Activity is successful, you'll pay a percentage of the original grant back to us in the future as a form of community re-investment. Each call for proposals will publish the latest rates we'll be asking for.

We're a not-for-profit organisation, so these community re-investment funds are directly invested in our future Activities. The payment commitment only kicks in once your product or service is on the market and earning an income – unless you choose to pay us earlier and bring the financial relationship to an end.

## What are we looking for?

We co-fund the development of commercial projects designed to improve our food system. We've grouped these into **Missions** to help us plan and monitor our Activity more effectively.

To help us know whether we're answering Mission problems effectively in the Activities we fund, we've identified a set of target indicators. These help us to make sure the projects are making good progress.

If you decide to apply for project funding, these are the kind of outcomes we'll want to see from you. We'll ask you to share market and commercial plans with us as part of your application to help us assess your predictions:

Mission	Success Indicators
<b>Healthier Lives Through Food</b>	<p>Increasing the availability of food products with improved nutritional profile to consumers.</p> <p>Increasing the availability of food products with reduced levels of salt, sugar, or trans and saturated fats to consumers.</p> <p>More consumers using innovative technology, products or services that help to change or personalise their diet in line with relevant national dietary guidelines.</p>
<b>Net Zero Food System</b>	<p>Reduction of CO2 in the food system (measured in tonnes).</p> <p>Reduction of other significant environmental impacts in the food system (usually measured in CO2 equivalent tonnes).</p> <p>An increase in the number of products on the market that use food waste or side-streams.</p> <p>An increase in the use of food waste or side-streams in food production.</p> <p>An increase in products on the market that use alternative or new ingredients and improve environmental impact outcomes.</p>
<b>Fully transparent, fair, and resilient food supply</b>	<p>Reduction in the estimated cost (€) burden attached to food insecurity and food safety issues.</p> <p>Overall increase <b>Societal Return on Investment</b> per € of grant due to the adoption of technology improving transparency, traceability or security across the food system.</p> <p>(This might include value from measures such as jobs created, costs avoided, food waste avoided, € value of efficiency gains made, investment raised, reduced public health costs, etc.)</p>

You'll hear us talk about **Focus Areas** when we're building collaborations and projects in our calls – these are simply technology areas within the food system where we think answers might come from.

We find organising our networking in this way makes it easier for people to find collaborators who have shared or complimentary interests. Each Focus Area is capable of answering questions across all the Missions.

**What types of Activities are we likely to fund?**

We want to fund innovative Activities. For us, that means proving, testing and applying results from research and practice to solve significant, real-world problems related to the food system.

All projects must end up with products or services tested (where necessary) and ultimately launched on the market.

We're able to be flexible in what we fund. For example, on top of traditional near-market R&D projects, we can provide funding to:

- Existing research project teams who have a commercialisation plan that needs follow-on funding to get to market (these don't have to be previous EIT Food projects – we can support projects from other EIT organisations, EU programmes, national and NGO schemes)
- Develop new applications for existing technology – transferring proven technology from other sectors into the food industry
- Run proof of concept Activities for products or services with high impact potential
- Run market demonstration and scale-up Activities for high impact technology or services which already have promising results
- Expand existing innovative programmes leading to behaviour change or better consumer outcomes
- Develop (or expand existing) technology platforms and testbed services that offer new innovation capabilities to start-ups and SMEs
- Co-fund innovation competitions with existing funding schemes or organisations.

Activities within the Innovation Area are selected as a first track through open calls to co-fund Innovation Challenges:

Funding Track	Likely Leadership	Duration	Indicative Funding
Innovation Challenges	Co-Leadership by an industry partner and research/university partner. Likely to have an extended support consortium in place.	Up to 24 months	Up to 600.000 EUR per Activity for 12 months.  Up to 1,2 million EUR per Activity over a maximum of 24 months.

As a general principle, the higher the grant amount, and the longer the Activity time-period, the greater the results and impact we want to see. A longer Activity can mean that you're further away

from market, and therefore the risk of not getting to market is higher. That’s why, for projects with longer time frames, we ask for substantial progress milestones and enhanced commercial plans.

You’ll need to have progress milestones in place at regular intervals in your project plan to help us monitor our investment. If projects slip against milestones and deliverables, we may have to ask you to replan. We may even have to reduce or withdraw funding as a last resort.

**Who should benefit from your Activity’s results?**

You will often hear us talking about the **Impact** of our work. What we mean by this is the identifiable extra benefit that particular groups of people, businesses, organisations or society in general will experience-because of the work we fund.

In the table below we describe some of the impact questions<sup>1</sup> you should consider for each mission. Our [Strategic Agenda](#) document also has an annex<sup>2</sup> where we provide links to published data sources, reference points and baselines. This will help you explain to us why you’ve prioritised particular issues when designing your project and show what you’re comparing your results to.

If you don’t have experience in forecasting social and economic or environmental impact, we suggest you include 5-10% of your budget to carry out an impact forecasting exercise. Doing this early in the project will give you a methodology to use and an assessment plan to work to. We might even ask you to do this as an early deliverable in your project if we feel it necessary.

Mission	Understanding your Impact
<p><b>Healthier Lives Through Food</b></p>	<p>The rate/ likelihood of experiencing Non-Communicable Diseases (NCDs) for certain groups of people is strongly linked to food and diet.</p> <p>You should consider which NCD risks might be lowered by your work, whose risks will be reduced, and where they might be living.</p> <p>This will allow us to better understand why you have chosen to look at a specific problem. This approach will also help you explain the benefit of your work as you will be able to compare your customers or users against national and/ or demographic data sets.</p> <p>The ultimate measure of benefit this area will be Health Adjusted Life Years (HALYs) which can be predicted once you understand which NCD risks are being reduced by the improvements you are making, by how much that risk is reduced and how many people are likely to have their risk reduced.</p>
<p><b>Net Zero Food System</b></p>	<p>Whether you’re directly targeting CO2 reduction or targeting other environmental factors which can be converted into CO2 equivalent tonnes as a measurement, you will need to clearly explain which sectors or products you are concerned with, and</p>

<sup>1</sup>Organisations such as the Impact Management Project publish guides to help understand this area: <https://impactmanagementproject.com/impact-management/impact-management-norms/>

<sup>2</sup> [https://www.eitfood.eu/media/documents/EIT\\_Food\\_Strategic\\_Agenda\\_2021-2027.pdf](https://www.eitfood.eu/media/documents/EIT_Food_Strategic_Agenda_2021-2027.pdf)

	<p>which stage in production/ distribution/ consumption you are focused on.</p> <p>Life Cycle Assessment (LCA) is a reliable way of demonstrating the scale of the particular issue you're looking at. We're happy for you to reference published LCA reports<sup>3</sup> – it's not essential to have carried out your own, but it makes your business case even stronger if you have.</p> <p>You'll also need to consider the geography of where you're working or intend to roll out your results. The significance of specific problems can be very different depending on location, business sector and consumer factors.</p>
<p><b>Fully transparent, fair, and resilient food supply</b></p>	<p>Reduction in the estimated € burden attached to food insecurity and food safety issues.</p> <p>Overall <b>Societal Return on Investment</b> from the adoption of technology that improves transparency, traceability, and security across the food system.</p> <p>(This might include measures such as jobs created, industry costs reduced or avoided, the value of efficiency gains made, investment raised, reduced public health costs, etc.)</p>

Please remember that impact can also come from *how* you do your project, not just from the results.

When you apply for funding, you should consider what opportunities you're creating with your Activity: working with start-up companies; working with social enterprises; diverse recruitment; giving career development opportunities to your team members; including under-represented groups of people in your product testing or consumer consultations – these are all examples of ways in which you can benefit individuals, organisations and groups through your work.

You and your teams will have access to a range of skills and business support programmes at EIT Food, as well as opportunities to build professional networks to support career development. By taking advantage of these, you'll help us all to build a strong and diverse food sector in the future.

How your results are published and promoted can also make a big impact. At EIT Food, we offer excellent communications support. We engage both the public and policy makers in all sorts of ways, from direct meetings to podcasts, social media to white papers. Our capability can help you to engage your audience and increase your reach, so think about how you might make best use of it.

**How can you get involved?**

You can get to know the EIT Food network and our teams any time, simply by contacting your nearest [regional office](#) and introducing yourself. All our contact details are published on our [website](#).

When we launch a call for proposals, it's always made public through the usual [EU grant advertising](#) platforms as well as on our [social media](#) channels and mailing lists.

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<sup>3</sup> [https://eplca.jrc.ec.europa.eu/uploads/ConsumerFootprint\\_BoP\\_Food.pdf](https://eplca.jrc.ec.europa.eu/uploads/ConsumerFootprint_BoP_Food.pdf)

We usually run networking events and online consortium-building initiatives and briefings during the call period. You'll be welcome to join these.

Please do contact us and join our briefing sessions. Doing so will help us to help you through the application process.

We're here to help bring your best ideas to life, with support, guidance and funding. Because together we can build a strong food system that's better for everyone.

## 2. Call Summary

Proposal Submission Process and Deadlines	Proposals will be evaluated in a 2-stage process which requires the submission of one proposal made up of two parts: Part A (eligibility and outline information) and Part B (full proposal details). This call for proposals offers two submission deadlines: <ul style="list-style-type: none"> <li>• 14 October 2022, noon CET</li> <li>• 13 April 2023, noon CET</li> </ul>
Total EIT Funding for the Call	20 million EUR, of which at least 5 M to be attributed for the second submission deadline.
Expected Size of EIT Grant Amount Per Funded Activity	Up to 600.000 EUR per Activity for 12 months. Up to 1,2 million EUR per Activity over a maximum of 24 months.
Reimbursement Rate and Co-funding	EIT Food will fund up to 70% of total eligible costs of the Activity (reimbursement rate). As such, the consortium must co-fund a minimum of 30% (co-funding) of the total project eligible costs with sources of funding other than EU funding.
Financial Return Mechanism: contributing to the EIT Food Sustainability Strategy	A Financial Return Mechanism is mandatory for each proposed Activity, as part of the EIT Food Financial Sustainability Strategy. Please see <a href="#">section 7.5</a> for information on the mechanisms available in this Call to fulfil the required minimum Return on Investment (ROI) to be paid back to EIT Food.
Consortium	<ul style="list-style-type: none"> <li>• At least three eligible organisations from two different EU countries or <a href="#">Third countries associated to Horizon Europe</a> at the time of proposal submission.</li> <li>• Members from 2 segments of the Knowledge Triangle: education/academia; research; business/industry.</li> <li>• Each of the three organisations must be active participants in the consortium, showing a role, commiserate with the level of budget, and should not fall under the same ownership.</li> <li>• At least one Exploiting Party/Parties responsible for commercial exploitation resulting from the Activity</li> </ul>
Activity Leadership	Any eligible consortium participant can be the “lead partner”. However, we encourage the Activity to be led by the participant responsible for commercialising the Activity’s results.
Maturity of the Innovation - TRL	A Technology Readiness Level (TRL) 5 or above (TRL 4 must be completed and demonstrated).

Please note, there will be a series of webinars in September to discuss the call and answer any questions you may have. There will be registration links published on the [Innovation Open Call 2023 Page](#) and for further information, please email [Call2023@eitfood.eu](mailto:Call2023@eitfood.eu).

### 3. Call for Innovation Activities: General Scope

EIT Food is calling for collaborative innovation Activities which will bring **innovative technology solutions to the market** in response to specific challenges in the agrifood sector. The proposed innovative solutions are expected to result in commercially viable products and services for the ultimate benefit of the European citizen.

Proposals responding to this call must include the following mandatory requirements:

1. Proposals must be submitted by a consortium of at least 3 eligible organisations committed to collaborating between 2 different eligible countries, representing at least two sides of the knowledge triangle<sup>4</sup>.
2. Proposals must be committed to delivering one or more near-to-market, commercially viable innovative technology solutions (goods, services, processes or products) addressing one EIT Food specific challenge.
3. The said innovative solution(s) must have a minimum Technology Readiness level 5 (TRL) at the time of the proposal submission (including proof of TRL level 4 completed and demonstrated). The proposal must also indicate their Market Readiness Level (MRL) but there is no minimum requirement requested.
4. Activity duration is variable according to the nature and maturity of the proposed innovation. However, proposals may not request more than 24 months of funding. Note that evaluation criteria will assess the proposal's requested budget and timeframe of implementation in conjunction with the impact to be delivered, in terms of KPIs, deliverables, and contribution towards impact indicators.
5. All proposed Activities, regardless of Activity duration, must launch at least one innovative solution (marketed innovation) including documented sales revenue of at least 10.000 EUR (ten thousand euros) no later than 6 months following the official end date of the project.

In the following sections, the above requirements will be explained in greater detail.

For a deeper understanding of the types of Innovation projects we have previously funded, please refer to the dedicated Innovation page on the EIT Food website: <https://www.eitfood.eu/innovation>.

#### 3.1 Proposal Alignment with EIT Food Strategy

All EIT Food funded Activities must be aligned with EIT Food's Impact Framework. Applicants will be asked to indicate the impact contribution of their proposals towards 3 levels: (1) Missions, (2) Focus Areas, and (3) Specific Challenges within each Focus Area. These 3 levels are further explained below. Each proposal can contribute to one or more Missions, Focus Areas, and Specific Challenges.

#### 3.2 Missions

EIT Food calls for proposals aiming to co-fund the development of commercial projects designed to improve our food system. We've grouped these actions into **Missions** to help us plan and monitor our Activity more effectively. These Missions are:

##### 1. Healthier Lives Through Food

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<sup>4</sup> The definition of the term Knowledge Triangle Integration is provided in the Glossary.

## 2. Net Zero Food System

### 3. Fully transparent, fair and resilient food supply

To help us know whether we're answering Mission problems effectively in the Activities we fund, we've identified a set of target **Impact Indicators**. These help us to make sure the projects are making good progress towards benefit for society. Our full impact framework is shown in our [Strategic Agenda 2021-27](#), which describes our funding and performance commitments to the EU.

These are the kind of outcomes we'll want to see from applicants applying for EIT Food funding. We'll ask applicants to share market and commercial plans with us as part of the application to help us assess their predictions:

Mission	Impact Indicators
<b>Healthier Lives Through Food</b>	Increasing the availability of food products with improved nutritional profile to consumers.  Increasing the availability of food products with reduced levels of salt, sugar, trans fats or saturated fats to consumers.  More consumers using innovative technology, products or services that help to change or personalise their diet in line with relevant national dietary guidelines.
<b>Net Zero Food System</b>	Reduction of CO2 in the food system (measured in tonnes).  Reduction of other significant environmental impacts in the food system (usually measured in CO2 equivalent tonnes).  An increase in the number of products on the market that use food waste or side-streams.  An increase in the use of food waste or side-streams in food production.  An increase in products on the market that use alternative or new ingredients and improve environmental impact outcomes.
<b>Fully transparent, fair, and resilient food supply</b>	Reduction in the estimated cost (€) burden attached to food insecurity and food safety issues.  Overall increase <b>Societal Return on Investment</b> per € of grant due to the adoption of technology improving transparency, traceability or security across the food system.  (This might include, for example, value from measures such as jobs created, regional economic growth, inward investment, public health or unemployment & social support costs avoided, food waste avoided, € value of efficiency gains made, investment raised, reduced public health costs, etc.)

### 3.3 Focus Areas

The EIT Food partnership has identified the following **6 Focus Areas** as strategic areas of the food system which currently offer the greatest potential for solutions to emerge. Applicants will be asked to indicate which Focus Area their innovation solution will address. Proposals which do not align with any Focus Area are not eligible to apply for this call.



### 3.4 Specific Challenges within each Focus Area

The EIT Food partnership has pre-defined Specific Challenges within each Focus Area where innovation technology solutions are the most needed. After selecting a Mission(s) and a Focus Area(s), proposals will be asked to select which Specific Challenge(s) their innovation solution addresses. Please refer to [Annex 2](#) for a full description of all Specific Challenges.

Proposals which do not align with any Specific Challenge are not eligible to apply for this call.

### 3.5 Special Note Concerning Effects of the Ukraine Crisis on the Food System

The ongoing conflict in Ukraine has already caused severe shocks to the food system on a global level, with developing countries facing food insecurity as a result of global food supply fluctuations. Although the Specific Challenges listed in the above section do not distinctly address the crisis in Ukraine, we would like to emphasise that food insecurity and the need for sustainable food systems are inherent to some of EIT Food's Specific Challenges.

## 4. Technology and Market Readiness Levels (TRL/MRL)

Proposals must specify the Technology Readiness Levels (TRL) and Market Readiness Levels (MRL) of the proposed Innovation Activity.

TRL<sup>5</sup> are a type of measurement system used to assess the maturity level of a particular technology. MRL<sup>6</sup>, in turn, are used to measure the commercial readiness of a technology for market entry. Refer to the table below for a more detailed view of the different levels.

Technology Readiness Level (TRL)	Market Readiness Level (MRL)
1 Basic principles observed	1 Basic market need observed
2 Technology concept formulated	2 Market needs for a specific target market articulated
3 Experimental proof of concept	3 Market needs validated through a preliminary demonstration
4 Technology validated in lab	4 Product attributes and features established
Technology validated in relevant environment	
5 <i>(industrially relevant environment in case of key enabling technologies)</i>	5 Other product dimensions for price, place, promotion established
Technology demonstrated in relevant environment	
6 <i>(industrially relevant environment in case of key enabling technologies)</i>	6 Product concept tested in intended market. Market size verified
7 System prototype demonstration in operational environment	7 Product acceptance demonstrated in market trial
8 System complete and qualified	8 Product feature validated in test market
Actual system proven in operational environment	
9 <i>(competitive manufacturing in the case of key enabling technologies)</i>	9 Product in market with proven sales

The TRL level is required to be at level 5 or higher (level 4 must be completed and demonstrated) at the time of submission. Proof of TRL level is required at the time of the proposal submission by providing supporting documentation in the form of prototypes, data, feedback from tests/trials, consumers' assessment, that back-up achievements of key previous TRL level.

In terms of the MRL level, proposals must indicate the MRL level at the time of submitting the proposal, however there is no minimum level required nor supporting documentation to be submitted for MRL.

## 5. EIT Food Impact Metrics & Requirements

EIT Food measures the impact of funded Activities at two levels, through **Key Performance Indicators** and **Impact Indicators**. Please review the requirements for both types of indicators below.

<sup>5</sup> Source: The TRL scale as a Research & Innovation Policy Tool, EARTO

<sup>6</sup> Source: MRL scale as adapted from the paper "From Project to Product: A New & Improved Approach to Technology & Market Readiness", Frank Bennett, 2016

## 5.1 Key Performance Indicators

Proposals must identify Key Performance Indicators (KPIs) that they are committed and capable to deliver during and after the duration of the funding period. Please refer to the full updated list of [EIT Core KPIs and EIT Food specific KPIs](#) on our Call Page.

Innovation proposals must include the following **mandatory KPIs**:

1. EITHE02.4 At least one Marketed Innovation launched on the market including documented and valid sales revenue of at least 10.000 EUR (ten thousand euros) in the year the KPI is to be delivered, and **no later than 6 months following the official end date of the Activity**. Innovations include new or significantly improved products (goods or services) and processes sold.
2. EITHE16: Continuously disseminated results/GP/LL: Results from the Activity should be continuously disseminated by consortia: number of results, good practice (GP) and lessons learnt (LL) disseminated through appropriate means (e.g., publications, online repositories, fact sheets, targeted workshops). Results are any tangible or intangible output of the action, such as data, knowledge and information.

The following KPI is strongly recommended, but not mandatory:

1. EITHE04.4: Number of start-ups established in year N as a result/based on the output(s) of Innovation/Research related Activities, or start-ups created for the purpose of an innovation Activity to organise and support the development of an asset (but not later than 3 years after completion of the KAVA) having financial transactions of at least 10.000 EUR for services/products (result of the KAVA) sold to customers.

EIT Food strongly encourages proposals to **select additional KPIs** to best capture the overall impact the consortium is committed to delivering. Moreover, specific evaluation criteria in both Part A and Part B of the evaluation will focus on the extent of proposal's intended impact, which will be reflected in the evaluation score. Please see [section 9.2](#) for further details on evaluation criteria.

## 5.2 Impact Indicators

We have developed system change **Impact Indicators** to measure how all EIT Food funded Activities progress towards achieving our impact goals. Proposals must therefore select which Impact Indicators they aim to achieve and describe how they intend to do so through the innovation Activity. Activities can generate multiple Impact Indicators and support multiple missions simultaneously.

At the application stage, applicants will be prompted to select which specific Impact Indicators they will contribute toward.

## 6. Workplan Stages & Requirements

The workplan for an Activity must describe tasks (work packages), milestones with measurable go/no-go criteria, and next steps towards implementation following successful completion of the

Activity. It also defines Outputs and Deliverables, and target values for the KPIs that will be achieved in 2023, 2024 and later years.

Proposals are required to structure their workplan and implementation according to the following **4 Stages and corresponding mandatory deliverables and KPIs in each Stage**. Only the deliverables mentioned below can be included in the proposal. They are all mandatory deliverables. As for KPIs, additional KPIs are strongly encouraged to be delivered above these minimum requirements.

**The number and structure of Work Packages within the proposal needs to match the below 4 Stages.** That being said, proposals **can start their workplan in any stage**, depending on their needs and TRL/MRL level. The only mandatory stage is the final market launch (Stage 4), which all proposals must complete, along with the associated Deliverables and KPIs in Stage 4.

The stage duration is flexible too: **Stages 1-4 can be shorter or longer according to the specific needs of the Innovation Activity. However, the total workplan of the activity cannot exceed 24 months of total implementation.**

The below table details the required Activities, deliverables, KPIs, and suggested duration for each Stage.

Stage	Explanation	Suggested Stage duration	Minimum mandatory Deliverables and KPIs
Grant Award	EIT Food operational requirements and consortium agreement signed.	N/A	Signed grant documentation
1. Design and Development	Start of Activities, EIT Food operational requirements and consortium agreement signed.  Technical, pilot planning, commercial and communication/dissemination plans developed and kicked off.	Up to 6 Months	DEL 01: A technical and commercial plan  DEL 02: A communication and dissemination plan
2. Pilot and Testing	Activities include progress by at least one technology or readiness level (TRL); prototype/proof of concept/beta version developed; product/ service/ model piloted; or innovative products tested through test-beds or other innovative platforms.	Up to 6 Months	DEL 03: A technical and commercial mid-term report  DEL 04: A report on the Designed/ Tested Innovation

3. Preparation of the launch to market	Finalisation of commercialisation and marketing Activities to ensure launch of product or service on the market	Up to 6 Months	DEL 05: A final commercialisation report
4. Market Launch	*Launch of innovation product or service on the market	Up to 6 Months	DEL 06: A final communication and dissemination report  DEL 07: A final technical and commercial report  KPI EITHE02.4: Marketed Innovation  KPI EITHE016: disseminated results/GP/LL

\*In the event that a project fails to complete activities, deliverables or KPIs in full, a reduction in payment for under-performance may be imposed.

## 7. Financial Aspects

### 7.1 EIT Funding Allocation

The maximum funding allocation for this call is up to 1,2 million EUR EIT Funding per Activity over a maximum of 24 months Activity and up to 600,000 EUR EIT Funding per Activity for 12 months.

There is an upper limit for the total grant that a participant can receive within the whole EIT Food Core Grant Agreement. This is only relevant for the participants who are heavily involved in other EIT Food Activities. The upper limit is 6M EUR per subgrantee (EU or HE associated) per Grant Agreement for the 3 years period 2023-25.

Members of the awarded consortia will be funded by EIT Food through a subgrant to execute the Activity. The subgrant will fund actual costs incurred by the subgrantees to implement the Activity. Those costs incurred need to follow the HE cost categories and eligibility criteria to be funded with the subgrant.

EIT Food reserves the right to lower the maximum sub granting amount per consortium member based on the risk profile.

## 7.2 Reimbursement Rate

EIT Food will fund up to 70% of total eligible costs of the Activity (reimbursement rate). As such, the consortium must co-fund a minimum of 30% (co-funding) of the total project eligible costs with sources of funding other than EU funding.

## 7.3 Eligibility of Expenditures

All costs need to comply with Horizon Europe regulations regarding the eligibility of expenses. Please refer to Article 6 of the [Model Grant Agreement](#) and the [Annotated Model Grant Agreement](#).

In addition to the guidance provided by Horizon Europe, the proposals must comply with the following maximum thresholds:

- Subcontracting can amount to a maximum of 15% of total costs
- Depreciation can amount to a maximum of 10% of total costs. In case of adding additional depreciation costs, please consult EIT Food in advance.
- Sub-granting: participants will be funded through a subgrant. Participants are not permitted to give a subgrant to another third party.

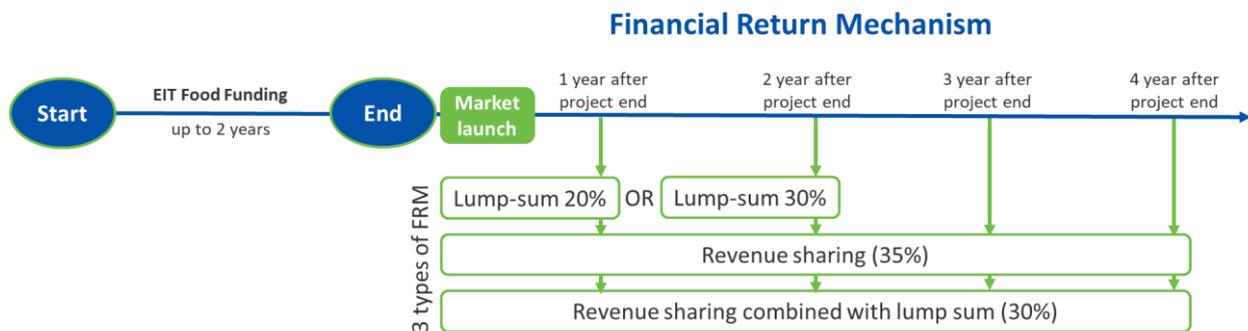
## 7.4 Intellectual Property Policy

EIT [Food IP's policy](#) complies with Horizon Europe's Intellectual Property Policy, found in Article 16 of the [Model Grant Agreement](#).

## 7.5 Financial Sustainability Requirements

EIT Food has developed a Financial Sustainability strategy to enable EIT Food to gradually become financially independent from EIT funding. Each innovation Activity funded by EIT Food, including those Activities resulting from this call for proposals, must contribute to the financial sustainability of EIT Food with a specific and robust Financial Return Mechanism (FRM) defining the Return on Investment (ROI) for successful Activities. In the Call for Proposals 2023, applicants must select one of the following 3 types of Financial Return Mechanisms:

- 1. FRM1: Revenue sharing of product/service sales (risk sharing)**  
Minimum ROI of 35% of the total EIT Food funding, within a timeframe up to 4 years after the project end.
- 2. FRM2: Lump-sum financial return mechanism (lump-sum)**
  - a. 20% of the total EIT Food funding as lump-sum ROI, if 1 year after the project end,  
*OR*
  - b. 30% of the total EIT Food funding as lump-sum ROI, if 2 years after the project end.
- 3. FRM3: Revenue sharing combined with lump-sum (combined option)**  
ROI of 30% of the EIT Food funding, within a timeframe up to 4 years after the project end.
  - 15% of the total EIT Food funding as lump-sum ROI, *AND*
  - Minimum 15% of the total EIT Food funding as revenue sharing of product/service sales.



The project proposal shall choose one of the three FRM options and provide sufficient detail about the proposed Financial Return Mechanism to allow for a proper evaluation by experts. The Financial Return Mechanism (including ROI) will need to be agreed upon within the parties of the consortium. EIT Food encourages and recommends putting in place an internal agreement (ideally in a Consortium Agreement, however the Partners are free to decide the format and document) between consortium partners, **defining a fair split of the risks and responsibilities** towards exploitation of the project results, IPs and ROI.

Should the project **not result in exploitation of the results, EIT Food has the right to claim a ‘non-completion fee’ of 10% of their EIT Food funding** from all members of the consortium. In addition, unless the fully agreed ROI has been reached, each consortium party will provide the additional Access Rights on the project results to EIT Food.

Agreements with the consortium Parties on the FRM will be finalised with EIT Food after proposal selection. A Financial Return Mechanism Agreement (FRMA) must be signed with the exploiting party/parties, on behalf of all the members of the consortium. The exploiting party(s) should have demonstrable capability and track record of commercial Activity and sales in the target market, with the capability to market, sell, scale up and grow the products or services. The Agreement will be finalised according to EIT Food FRMA terms and conditions. The FRMA must be agreed upon and signed by the exploiting party/parties and EIT Food as a **mandatory condition for funding**.

More details on the principle of Financial Sustainability, elaboration on the various mechanisms, evaluation criteria, and the process for agreeing on the terms of the proposed Financial Return Mechanism are provided in [Annex 1](#).

## 8. General Proposal Preparation and Submission

### 8.1 Who can apply?

Participants from Member States (MS) of the European Union (EU) and Horizon Europe Associate Countries are welcome to submit proposals. In an exceptional case, an entity not coming from the EU or the Third countries (not associated to Horizon Europe) can be awarded financial support, if approved directly by the EIT.

Please find eligibility requirements for individual organisation, consortia and proposals eligibility below.

## 8.2 How to apply?

To begin an EIT Food proposal submission, [applicants must register in Plaza](#), EIT Food's proposal submission platform. Please note:

- PLAZA registration is not automatic. The EIT Food PLAZA support team must approve all registrations.
- Please register at least 5 working days before the call closes to ensure there is time to check your registration information and approve your registration request.
- Once approved, you will receive a one-time password for you to log in and begin your proposal.

Visit our [Call Page](#) to register for upcoming webinars detailing how to submit a proposal.

## 8.3 Submission Deadlines

Activity Leaders must submit a completed proposal in Plaza by one of the two submission deadlines:

- First Submission Deadline: **14 October 2022, 12:00 CET**
- Second Submission Deadline: **13 April 2023, 12:00 CET**

## 8.4 Funding Available

Total funding available for selected 2023 activities resulting from this call is estimated at 20 million EUR, of which 5 million EUR will be reserved for the second submission deadline in April 2023.

EIT Food may allocate additional funds to the call if additional funding is available and the proposals show extraordinary quality.

## 8.5 Proposal Submission Support

To assist you in preparing and submitting your proposals, we offer:

- [Call Webinars/Matchmaking](#): Join our informational webinars, aimed at supporting you in your proposal submission, and our matchmaking events. Our goal is to ensure open, free, and fair access to information as you prepare your proposals.
- [Frequently Asked Questions](#) (FAQ) to find answers to the most frequently asked applicant questions.
- [Help](#). Can't find the answer you need at the webinars, in the FAQ list or on our Call Page? Please contact [Call23@eitfood.eu](mailto:Call23@eitfood.eu).

**Activity leaders are strongly recommended to complete proposals well in advance of the deadline.** If a technical failure occurs when submitting, please email the PDF of your completed proposal and mandatory documents to [Call23@eitfood.eu](mailto:Call23@eitfood.eu) **before the deadline**.

## 8.6 Mandatory Documents

As part of your proposal submission, you are required to upload the following mandatory documents. Please find the templates and descriptions of mandatory documents on the [Call Page](#).

All proposals must submit the following 5 mandatory documents to be eligible for evaluation:

1. An Implementation Schedule (a Gantt chart or other)
2. A Business Model Canvas (template provided)
3. A Criticality Map (template provided)
4. Proof of TRL 5 (TRL 4 completed and demonstrated). Upload one single PDF file.
5. A Commercialisation Strategy (template provided): All items mentioned below shall be uploaded as one single pdf document:
  - Serviceable Obtainable Market: documentation explaining which expected SOM and market share your quantification is based on. This might include: draft/expected offtake agreements, letters of intent customers, market research reports, competitor analysis etc.). Free format, no template available.
  - Market introduction / distribution channels: a Business Plan that includes the description of the sales/distribution channels for the described SOM. Free format, no template available.
  - Product Readiness Level: Please provide evidence documenting the status of the activities required to launch the innovation in the market.  
Roadmap Go To Market And Scale Up Milestones For KERs: evidence documenting the status of the activities required to launch the innovation in the market (product readiness level). Free format, no template available.

## 9. Evaluation and Selection Process

Proposals are selected based on the evaluation result, portfolio fit and available funding. Note that proposals will be evaluated based on the exact information provided at the time of submission and not based on the potential of the Activity.

### 9.1 Eligibility

We conduct eligibility checks on each organisation, consortium, and proposal.

Individual Organisation Eligibility	Each consortium member must:
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	<ul style="list-style-type: none"> <li>✓ Be a legally incorporated entity in the EU or Horizon Europe eligible country, which has been incorporated for a minimum of 3 years</li> <li>✓ Have at least 3 years' published accounts showing business Activity. Note: EIT food will limit the grant value to 50% of turnover, based on the average turnover of the previous 3 years</li> <li>✓ Have at least two statutory officers, such as registered directors. One-person legal entities are not eligible to participate in this call</li> <li>✓ Provide a PIC Number: <a href="#">Register your organisation in the "Funding and Tender Opportunities Portal – European Commission"</a></li> </ul>
Consortium Eligibility	The consortium must be composed of:
	<ul style="list-style-type: none"> <li>✓ At least three eligible organisations from two different EU countries or <a href="#">Third countries associated to Horizon Europe</a> at the time of proposal submission</li> <li>✓ Each of the three organisations must be active participants in the consortium, showing a role, commiserate with the level of budget, and should not fall under the same ownership</li> <li>✓ At least one Exploiting Party/Parties responsible for commercial exploitation resulting from the Activity</li> <li>✓ Members from 2 segments of the Knowledge Triangle: education/academia; research; business/industry</li> </ul>
Proposal Eligibility	To be eligible, proposals must:
	<ul style="list-style-type: none"> <li>✓ Be submitted completely, in English, with all mandatory documents in our PLAZA submission tool by the deadline</li> <li>✓ Have a Reimbursement Rate of 70%</li> <li>✓ Comply with Financial Sustainability Requirements stated in <a href="#">section 7.5</a> of this document</li> <li>✓ Comply with the KPI requirements stated in <a href="#">section 5.1</a> of this document</li> <li>✓ Be cost compliant with Horizon Europe regulations regarding the eligibility of expenses. Please refer to Article 6 of the <a href="#">Model Grant Agreement</a> and the <a href="#">Annotated Model Grant Agreement</a></li> </ul>

**Please Note:**

1. Failing any of the above criteria will make your proposal ineligible. Failing to meet the Individual Organisation criteria will make that single organisation ineligible, which might affect the eligibility of the whole proposal, depending on the relevance of the role of the applicant being removed. If an applicant or the proposal is ineligible, participants will be informed.
2. According to EU policies and measures, Russian entities will not be authorised to participate in any new grant under the EU Research and Innovation programmes. This ban applies not only to their potential participation as beneficiaries, but to their potential participation *in any kind of role*: beneficiaries, linked third parties/affiliated entities, subcontractors, in-kind contributors, international partners/associated partners, and third parties receiving financial support. [Find the full statement from the European Commission here.](#)

3. Proposals will be deemed ineligible if any organisation in the consortium is:
  - a. bankrupt, subject to insolvency or winding-up procedures, where its assets are being administered by a liquidator or by a court, where it is in an arrangement with creditors, where its business Activities are suspended, or where it is in any analogous situation arising from a similar procedure provided for under national laws or regulations;
  - b. it has been established by a final judgment or a final administrative decision that the organisation is in breach of its obligations relating to the payment of taxes or social security contributions in accordance with the applicable law;
  - c. it has been established by a final judgment or a final administrative decision that the organisation is guilty of grave professional misconduct by having violated applicable laws or regulations or ethical standards of the profession to which the organisation belongs, or by having engaged in any wrongful conduct which has an impact on its professional credibility where such conduct denotes a wrongful intent or gross negligence;
  - d. is found to be attempting to influence the decision-making process of the call during the process;
  - e. attempting to obtain confidential information that may confer upon it undue advantages in the call process;
  - f. it has been established by a final judgment that the organisation is guilty of fraud, corruption or money laundering.

## 9.2 Part A & B Evaluation

Once your consortium and proposal have passed the eligibility checks, we will undertake a two-step evaluation of your proposal: Part A and B.

- Proposals will be evaluated by external and internal (EIT food) experts.
- All proposals will receive an email with the results of Part A and evaluator comments.
- A maximum of 30 proposals will pass to Part B.
- Applicants whose proposals pass to Part B will be invited to attend a Panel meeting with our experts.
- Note: Proposals meeting the Part A quality threshold in the first submission deadline but ranking below the 30 selected proposals, can automatically be included in the Part B evaluation of the second submission deadline.

### 9.2.1 Scoring

Proposals will be evaluated in Part A and B, using the evaluation criterion in sections 9.2.2 and 9.2.3 and the following scoring grid.

Each evaluation sub-criterion will be scored from 0 to 5 using the below scoring grid. The resulting scores are then normalised to calculate the final result for the proposal.

Score		Description
0	Not addressed	Not addressed
1	Poor	The criterion is inadequately addressed, or there are serious inherent weaknesses
2	Fair	Proposal broadly addresses the criterion but there are significant weaknesses
3	Good	Proposal addresses the criterion well, but a number of shortcomings are present
4	Very good	Proposal addresses the criterion very well, but a small number of shortcomings are present
5	Excellent	Proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

### 9.2.2 Part A Evaluation Criteria

In Part A, proposals will be evaluated by three expert evaluators, using the below **criteria and weighting**.

- Excellence: 40%
- Impact Pathways and KPIs: 30%
- Quality and Efficiency of Implementation: 30%

**The quality threshold for Part A is a total score of 3.**

Excellence – 40%		Impact Pathways and KPIs 30%		Quality and efficiency of implementation – 30%	
25%	*Clearly demonstrated market and societal need/demand for the proposed innovation.	40%	Proposal significantly contributes towards EIT Food’s Societal, Environmental, Economic impact. There is a clear link between the project’s KPIs and Impact Indicators.	40%	Value for Money of the proposed Activity in function of the proposed Activity duration (# months/years), and generated impact (# key KPIs, Impact Goals’ contribution)  Extent of proposal’s co-funding rate will be reflected in the evaluation score.
25%	Innovativeness of the proposed solution, advancing state of the art in the field.	40%	Proposal’s intended impact is significant, as measured by EIT Core KPIs: <ul style="list-style-type: none"> <li>• Marketed_Innovations</li> <li>• Start-ups created</li> </ul> Extent of proposal’s intended impact will be reflected in the evaluation score.	40%	Competences, operational capability, and complementarity of the consortium to achieve project objectives
25%	*Soundness/credibility of the business concept and robust commercialisation strategy are aligned with the indicated MRL’s feasibility to launch product on the market.	20%	Clearly demonstrated collaborative strength and synergies of consortium to contribute to the EIT Food Focus Area Specific Challenges with the innovation(s) being developed.	20%	Adequate resources (human and financial) to achieve project objectives
25%	TRL Stage of development of the innovation is clearly demonstrated in terms of: <ul style="list-style-type: none"> <li>(1) its critical/non-critical technologies are clearly demonstrated</li> <li>(2) Convincing proof of TRL stage of at least 5 at the time of proposal submission has been provided, in the form of prototypes, data, feedback from tests/trials, consumers’ assessment, that show evidence of completion/achievement of TRL 4.</li> </ul>				

\* Important remark: Any proposal scoring less than 2 (Fair) in the criteria “Clearly demonstrated market need/demand” or “Soundness/credibility of the business concept and robust commercialisation strategy” will be excluded during the Part A evaluation process.

### 9.2.3 Part B Evaluation Criteria

Proposals scoring above the quality threshold (3) in Part A will be ranked, and a maximum of 30 proposals will proceed to Part B, which includes a remote expert evaluation and a Panel meeting with experts and applicants.

Experts will evaluate Part B based on the following **criteria and weighting**:

- Excellence and Implementation: 40%
- Compliance with Financial Sustainability Principles: 30%
- KIC Portfolio Strategic Fit, Impact & KTI: 30%

**The quality threshold for Part B is a total score of 3.5.**

Excellence and Implementation 40%		Compliance with Financial Sustainability Principles 30%		KIC Portfolio Strategic Fit, Impact & KTI 30%	
25%	Consortium’s research and analysis of market need is clearly demonstrated. Value proposition for consumers is clearly demonstrated.	40%	<p>**Ambitious commercialisation strategy and competitive Financial Return Mechanism contribution to KIC’s Financial Sustainability</p> <p>Extent of proposal’s ROI rate, including the capability and credibility of the proposed exploiting party(s) to market, sell, scale up and grow the product or service in the target market will be reflected in the evaluation score.</p>	25%	**Extent, relevance, and timeliness of proposal’s intended impact, as measured by the number and quality of KPIs and Impact Indicators, will be reflected in the evaluation score.
25%	Business plan is well researched and convincing. Uniqueness of the innovation is clearly demonstrated.	30%	<p>**Revenues expected from the Key Exploitable Results (KER) are realistic. The market assumptions of said revenues are thoroughly explained. A robust IP management plan is in place.</p> <p>Extent of proposal’s revenue contribution will be reflected in the evaluation score.</p>	25%	Demonstration of Knowledge Triangle Integration, through contribution of EIT Food support/ programmes/ network/ capability & resources to the development, deployment and scaling up of solutions and Impact Goals.
25%	**Feasibility to increase the MRL/TRL level of the innovation within the timeframe of the proposed Activity and to launch product on the market within the indicated timeframe is realistic and clearly explained.	30%	The ramp up in expected annual revenues is realistic and substantiated by project milestones for market introduction and commercial scale-up.	25%	Strength of Economic Impact, via forecasted income and through wider economic, societal, health or environmental gains which can be attributed to the Activity.

<b>25%</b>	Effectiveness and feasibility of the workplan are clear and convincing to achieve project objectives. Thorough and comprehensive risk register and corresponding mitigation plan.			<b>25%</b>	Role and commitment of exploiting party is clearly defined and convincing. Proposals with an SME in the role of exploiting party will be granted a higher score for this criterion.
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**\*\*Important remark:** Any proposal scoring less than 3 (Good) in the criteria *“Feasibility to increase the MRL/TRL level”*, or *“Ambitious commercialisation strategy and competitive Financial Return Mechanism contribution to KIC’s Financial Sustainability”* or *“Revenues expected from the Key Exploitable Results (KER)”* or *“Extent, relevance, and timeliness of contribution from project-level KPIs and Impact”* will not be considered for funding.

### 9.3 Panel Meetings

The Activity Leaders of proposals selected for Part B will receive an **invitation** with the time and date of their **Part B Panel Meeting** and feedback from Part A to assist in their Panel preparation.

- Prior to the Panel Meeting, expert evaluators, commercialisation experts and internal EIT Food staff will review the selected proposals in depth and prepare questions for the applicants.
- At the Panel Meeting, each consortium will make an **online pitch** followed by a **Q&A session** with the evaluators.
- Following the Panel, evaluators will enter their final scores and the Rapporteur will compile evaluator feedback to be shared with each consortium.

### 9.4 Compiling Scores

EIT Food staff will compile a final Part B ranking of all proposals that scored above the Quality Threshold of 3.5.

**Proposals will be selected based on this ranking until the funding is exhausted.**

Proposals will not be offered funding if they are in any way manifestly contrary to EU general principles or established EU priorities or policies.

### 9.5 Communication of Results to Applicants

EIT Food will send each Activity Leader an email with the results of Part B, including evaluator comments and Rapporteur reports.

If EIT Food issues a conditional offer, said conditions will be included in the Part B decision letter.

**Proposals’ approval by EIT Food are subject to due diligence and final approval by the EIT.**

### 9.6 Appeal on Evaluation Results

Activity Leaders can submit an appeal within 5 days of result receipt, if:

1. There is an indication that the results of the eligibility checks were incorrect
2. The evaluation of their proposal has not been carried out in accordance with the procedures set out in this document.

For more details, please read our [Appeal Procedure/Redress Mechanism](#).

## 10. Next Steps for Selected Proposals

### 10.1 EIT Food Legal Framework & Legal Documents to be Signed

Following the initial notification letter, selected proposals will receive a second communication with instructions regarding the completion of the following documents, as well as agreeing to EIT Food's conflict of interest policy:

- EIT Food Partner Agreement concluded between EIT Food and EIT Food Partners (regardless of partner category) outlining the main principles of the KIC Partnership and the rights and obligations of the Partners of the Partners in EIT Food.
- Subgrant Agreement between EIT Food and Partners receiving EIT grants setting out the main principles under the Cascade Funding for a Partners receiving EIT grants under the Cascade Funding and outlining the main rights and obligations in this regard, such as liability, IP principles, payments, termination, suspension etc.
- Project Agreement between EIT Food and the project consortium the duration of project implementation, setting out obligations (such as KPI delivery, Financial Return Mechanism), funding amount for each partner as well as other aspects governing the implementation of the project.
- Financial Return Mechanism Agreement: An agreement on the Financial Return Mechanism needs to be signed between EIT Food and exploiting party/parties of the consortium.

### 10.2 Payment Schedule

EIT Food will transfer funding in instalments. A proportion of the Activity budget will be pre-financed, with subsequent payments being linked to the achievement of milestones as explained in [Section 6](#).

The majority of the grant will be transferred at the end of the Activity, once eligible costs have been determined and following the completion of final Activity reporting and the fulfilment of all obligations specified in the Project Agreement.

### 10.3 Monitoring

All Activities selected for funding undergo continuous monitoring by EIT Food to ensure effective progress and implementation at each Stage in accordance with the Project Agreement, and to trigger payments according to the achievement of milestones, deliverables and KPIs.

The monitoring at the end of each Stage will cover several aspects relating to the Activity implementation including, but not limited to: achievement of milestones, deliverables and KPIs; risk management; financial management; quality assurance; progress against KPI achievement and

impact delivery; communication and dissemination; and progress towards commercialisation and exploitation of results.

EIT Food may request regular reporting of actual costs incurred with the subgrant, as well as regular reporting of KPIs and deliverables, together with the supporting documentation.

The monitoring process may result in an amendment to the Activity workplan and/or budget, however the Financial Return Mechanism Agreement (please refer to [Section 7.5](#)) cannot be re-negotiated following the approval of the Activity.

In the case of under-performance, significant delay of implementation, misconduct of the consortium, or any other reason jeopardizing the timely implementation of the Activity identified during the monitoring process, EIT Food reserves the right to discontinue or restructure the funding of the Activity at any point during the Activity duration.

Furthermore, EIT Food will monitor all Activities up to 5 years after Activity completion to track long-term impact, the status of commercialisation and to ensure the achievement of KPIs anticipated after Activity end.

## 11. Timeline of the Call

Action	Date
Call 2023 Guidelines are published	19 August 2022
First Submission Deadline	14 October 2022, noon CET
Communication to applicants: selected and not selected	16 January 2023
Second Submission Deadline	13 April 2023, noon CET
Communication to applicants: selected and not selected	11 July 2023

The timeline proposed above is indicative and EIT Food reserves the right to adjust the timeline as required. Any amendment to the timeline will be communicated on the [Call Page](#).

## Glossary

Activity, or KIC Added Value Activity (KAVA)	The EIT Food Business Plan consists of Activities (projects), commonly referred to as “KAVA” s, each belonging to one Area.
Area	EIT Food defines several areas in which it operates: Education; Innovation; Business Creation; Public Engagement; and Regional Innovation Scheme (RIS).
Co-funding	Part of the eligible costs incurred in implementing the Activity that is not reimbursable through the EIT grant. In particular, the applicants’ own investments and national or regional public funding programmes. Co-Funding cannot come from other EU funding sources.
CLC: Co-Location Centre	EIT Food has five Co-Location Centres, or CLCs, which are regional offices located throughout Europe.
Deliverable	In EIT terminology, a Deliverable is a report that is sent to EIT Food providing information to ensure effective monitoring of the Activity. There are different types of deliverables (e.g. a technical and commercial plan, a communication and dissemination plan etc.)
Cascade Funding Model	<p>Cascade funding model, also known as Financial Support to Third Parties (FSTP) or “sub-granting” under the EU Financial Regulation, is a commonly used mechanism to deliver and implement Activities under EU funding.</p> <p>It means that the implementation of the portfolio of Activities is cascaded by the beneficiary (KIC legal entities/CLCs) to further recipients of the EU grants via Calls (third party subgrantees).</p>
Key Exploitable Results (KERs)	A product, process, new service, new standard, new training courses etc., which will be further developed for market introduction after the Activity end , and which respond to a specific need for a well-defined group of consumers/users.
KIC: Knowledge Innovation Community	EIT Food is one of the Knowledge Innovation Communities (KICs) that operate under the regulations of EIT.
KPI: Key Performance Indicator	Set of impact indicators aiming to build proxies assessing the capacity of the EIT Food to generate innovation-based growth.
Knowledge Triangle Integration	Our Impact Pathways integrate business creation, education, public engagement, and innovation investment programmes in an EIT model referred to as “Knowledge Triangle Integration” (KTI). For EIT Food this means ensuring “KTI” from first principles through consumer-centric Activity design to achieve outcomes leading to real-world impact for individuals, society, and business.

Output	That which is generated during the Activity implementation. This may include for example: new products, services or processes, transformation of existing products, innovative education and training modules, new curricula and qualifications, e- learning modules, guidance material for new approaches and methodologies, testbeds and experimental facilities, prototypes, patents, publications, etc. Outputs have economic and societal impact.
EIT Food Partner	An organisation that has undergone the necessary application process to become a partner of the EIT Food Partnership and is affiliated to EIT Food IVZW. More details on Partnership Policy, Partner Rights and Obligations are available on the EIT Food website.
EIT Food Partner Agreement	Agreement concluded between EIT Food and EIT Food Partners (regardless of partner category) outlining the main principles of the KIC Partnership and the rights and obligations of the Partners of the Partners in EIT Food according to each partnership category.
KIC /Subgrantee	Cascade Funding/ Subgrantee: A participant in an EIT food Activity who receives funding under the cascading funding model through a sub-grant or FSTP (Financial Support to Third Parties)
MRL: Market Readiness Level	The “Market Readiness Level” is a methodology used to evaluate how close to the market project outputs/products are. A numerical combination of; TRL. Technological Readiness Level. Measuring the maturity of a technology being developed by a project.
Partnership Agreement (PA)	This is the 4-year contract between EIT and EIT Food with the effective date of January 1, 2021, laying down the general terms and conditions under which the KIC EIT Food must operate as an Institutionalised European Partnership. These provisions will be added as an annex to the EIT Partner Agreement. The EIT, as a condition to participate in its Activities requires the KIC to transpose certain obligations arising from the PA in the internal agreements of the KIC with its Partners
Project Agreement	An agreement signed between EIT Food and the project consortium for the duration of project implementation setting out obligations (such as KPI delivery, Monitoring, Financial Sustainability obligations), funding amount for each applicant as well as other aspects governing the implementation of the project.
Subgrant Agreement	Subgrant Agreement between EIT Food setting out the main principles under the Cascade Funding for a Partners receiving EIT grants under the Cascade Funding and outlining the main rights and obligations in this regard, such as liability, IP principles, termination, suspension etc.
Task	Work package of an Activity.
TRL: Technology Readiness Levels	TRL are a type of measurement system used to assess the maturity level of a particular technology. Manufacturing Readiness Levels, in turn, are used to

	assess the maturity of a given technology, system, subsystem, or component from a manufacturing perspective.
Turnover	Turnover is the total revenues made by a business in a certain period.

## Annex 1: The Financial Return Mechanism

### EIT Food Financial Sustainability Strategy

A unique feature of the Partnership Agreement between the EIT and EIT Food is the obligation for EIT Food to become financially sustainable in the long term. This means that as a condition to receive EIT funding, EIT Food must develop and implement revenue-generating strategies to sustain the Innovation Ecosystem and Knowledge Triangle Integration<sup>7</sup> Activities beyond the period covered by the EIT grant. Plans to achieve financial autonomy are outlined in the Financial Sustainability Strategy in the [EIT Food Strategic Agenda 2021-2027](#).

EIT Food is committed to developing a level of financial autonomy which gradually reduces the proportion of EIT grant funding within a mixed portfolio of funding over the long term. As a result, EIT Food supports Activities and initiatives with the potential to provide both a financial return and a diverse mix of revenue streams and mechanisms. Through this Call for Proposals 2023, it is the ambition of EIT Food to attract and support excellent and complex Activities close to maturity for market uptake.

In line with the EIT Food Financial Sustainability Strategy and EIT requirements, all Innovation Activities selected for funding are required to commit to giving a financial return to EIT Food. Once an Activity has been selected for funding, the proposed Financial Return Mechanism will be formalised according to the EIT Food Financial Return Mechanism Agreement (FRMA) terms and conditions. The FRMA must be agreed to and signed by the exploiting parties and EIT Food as a mandatory condition for funding.

The payment of the amounts due to EIT Food (during the actual commercial exploitation) should not be considered reimbursement of the EIT Food grant awarded to the Activity. Instead, the FRMA details the mechanism designed to contribute to the financial sustainability of EIT Food based on the Activity's successful commercialisation. In other words, it is a consideration for EIT Food's management of the grant linked to the exploitation of the Key Exploitable Results (KERs) resulting from the Activity.

### Defining the Financial Return Mechanism

In the call for proposals 2023, applicants must select one of the following 3 types of Financial Return Mechanisms:

1. **FRM1: A Financial Return Mechanism based on revenue sharing (risk sharing)** i.e., sharing a percentage of revenues generated by commercializing the Key Exploitable Result(s) (KERs) during an agreed time-period. In this case, the 'success fees' for EIT Food, based on the successful commercialisation, must target a minimum of 35% of the total EIT Food funding, to be paid within maximum 4 years after the end of the project.
  - a. Minimum ROI of 35% of the total EIT Food funding, within a timeframe up to 4 years after the project end.

#### Example FRM1

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<sup>7</sup> See Glossary for the definition of Knowledge Triangle Integration

In the case of FRM1, the Financial Return to EIT Food will depend on the actual revenues generated as a result of exploiting the Key Exploitable Results; for example, the sales of a new and sustainable food product based on the innovation funded by EIT Food in the project. The following table provides an example of such a Revenue Sharing schedule, for a project with €600k EIT Food funding and a predicted revenue stream from the commercialisation of the project's KERs over a period of 4 years of € 3,55M.

The targeted 35% of ROI in this example (e.g., €210k) could be paid as fixed 5,9% over the predicted revenues, for a period of 4 years, starting in year 1 after the project end.

The exploiting party/parties of the consortium may decide to offer EIT Food a revenue sharing that is higher than the (minimum) 35%, thereby offering a FRM potentially more competitive for the proposal's evaluation compared to other proposals, therefore potentially increasing its chances to be funded.

FRM1: Risk sharing		FRM target	Predicted annual revenues and FR of KER exploitation				€ 3.550.000
	€		yr 1	yr 2	yr 3	yr 4	
EIT Food Grant	€ 600.000	35%					
Financial Return (ROI)	€ 210.000						
Total predicted revenues over 4 years	€ 3.550.000		€ 100.000	€ 450.000	€ 1.000.000	€ 2.000.000	
Annual % of revenue sharing	5,9%		€ 5.915,49	€ 26.619,72	€ 59.154,93	€ 118.309,86	€ 210.000

2. **FRM2: A mechanism based on a lump-Sum (lump-sum)**, which is independent of the revenues generated. In this case, the ROI is 20% of the total EIT Food funding if paid within 1 year after the project ends, OR, 30% if the ROI is paid within 2 years after the project ends.
- 20% of the total EIT Food funding as lump-sum ROI, if 1 year after the project end, OR
  - 30% of the total EIT Food funding as lump-sum ROI, if 2 years after the project end.

#### Example FRM2

In this case, the Financial Return to EIT Food will not depend on the actual revenues generated but on the moment at which a lump-sum will be paid to EIT Food.

This first table provides an example of such a schedule, for a project with €600k EIT Food funding and lump-sum payment in year 1 after the project end. If the payment takes place in year 1 after the project end, the lump-sum amounts to 20% of the EIT Grant.

FRM2a: Lump-sum		FRM target	Predicted annual revenues and FR of KER exploitation				€ 1.800.000
	€		yr 1	yr 2	yr 3	yr 4	
EIT Food Grant	€ 600.000	20%					
Financial Return (ROI)	€ 120.000						
Total predicted revenues over 4 years	€ 1.800.000		€ 50.000	€ 250.000	€ 500.000	€ 1.000.000	
Total lump-sum	€ 120.000		€ 120.000				€ 120.000

The second table provides an example of such a schedule, for a project with €600k EIT Food funding and lump-sum payment in year 2 after the project end. If the payment takes place in year 2 after the project end, the lump-sum amounts to 30% of the EIT Grant.

FRM2b: Lump-sum		FRM target				
EIT Food Grant	€ 600.000	30%	Predicted annual revenues and FR of KER exploitation			
Financial Return (ROI)	€ 180.000		yr 1	yr 2	yr 3	yr 4
Total predicted revenues over 4 years	€ 1.800.000		€ 50.000	€ 250.000	€ 500.000	€ 1.000.000
Total lump-sum	€ 180.000		€ 180.000			
						€ 1.800.000
						€ 180.000

**3. FRM3: A combined ROI mechanism of revenue sharing and lump-sum (combined option),** where in total, 30% of the EIT Food funding is paid in 2 parts: 15% as lump-sum and 15% as revenue sharing. This must be accomplished within 4 years from the project's end with a schedule proposed by the exploiting party/parties at the time of application.

- a. ROI of 30% of the EIT Food funding, within a timeframe up to 4 years after the project end.
  - 15% of the total EIT funding as lump-sum ROI, AND
  - Minimum 15% of the total EIT funding as revenue sharing of product/service sales

#### Example FRM3

*In this case, the Financial Return to EIT Food will partly depend on the actual revenues generated as a result of exploiting the Key Exploitable Result(s). The other part could be paid as an annual lumpsum. For instance, a split can be made between those partners (e.g., a large corporate) who prefer to pay a lump-sum without having to justify actual revenues generated, and those partners (e.g., a scale-up) who prefer to make the financial return dependent on the actual commercial success of the exploitation. The following table provides an example of such a payment schedule, for a project with €600k EIT Food funding and a predicted revenue stream from the commercialisation of the project's KERs over a period of 4 years of €2,575M.*

FRM3: Low lump-sum + revenue sharing		FRM target					
EIT Food Grant	€ 600.000	30%	Predicted annual revenues and FR of KER exploitation				
Financial Return (ROI)	€ 180.000		yr 1	yr 2	yr 3	yr 4	
Total predicted revenues over 4 years	€ 2.575.000		€ 75.000	€ 250.000	€ 750.000	€ 1.500.000	
Annual lump-sum * 4 years	€ 22.500		€ 22.500	€ 22.500	€ 22.500	€ 22.500	
Annual % of revenue sharing	3,5%	€ 2.621,36	€ 8.737,86	€ 26.213,59	€ 52.427,18	€ 90.000	
		TOTAL	€ 25.121,36	€ 31.237,86	€ 48.713,59	€ 74.927,18	€ 180.000

*The targeted 30% of ROI in this example will be paid as €90k (15% ROI) lump-sum over 4 years (e.g., € 22,5k per year) in combination with 3.5% over the predicted revenues, for a period of 4 years, starting at the latest in year 1 after the project end.*

*As in the example of FRM1 (risk-sharing) the exploiting party/parties may propose to EIT Food a revenue sharing that is higher than the (minimum) 15% making the proposed FRM potentially more competitive during the proposal's evaluation compared to other proposals, therefore potentially increasing its chances to be funded.*

#### The financial basis for calculating the ROI

The indicated minimum required ROI will be calculated based on the EIT Food funding budgeted for the entire lifetime of the Activity. Any subsequent budget amendment resulting from the monitoring process and approved through the Business Plan Amendment will be taken into consideration.

## Consequences of non-completion of the FRM

Applicants are free to choose one of the three Financial Return Mechanisms explained above. In all cases, this means a commitment to make all reasonable efforts to exploit and reach the targeted ROI within the chosen Financial Return Mechanism.

### 1. 'non-completion fee'

Should the project - in spite of reasonable efforts to exploit - not result in commercialisation of the results, EIT Food is entitled to claim a 10% 'non completion fee' of the EIT Food funding allocated to each consortium partner. The 'non-completion fee' is applicable for all three Financial Return Mechanisms. In case of revenue sharing (FRM1), should revenues from commercialising the KERs fall behind and the ROI is lower than 10% of the EIT Food funding, EIT Food will charge an additional amount to each individual consortium partner up to the 10% 'non completion fee'.

### 2. Additional access rights

During the project, and during the exploitation period, the progress of the FRM shall be evaluated by EIT Food. In case the exploiting party/parties could not reach the targeted ROI linked to the chosen FRM (e.g., 35% under FRM 1, 20% or 30% under FRM 2, or 30% under FRM 3) EIT Food reserves the right to request the following additional Access Rights; *exclusive or non-exclusive, fully paid-up, irrevocable, worldwide Access Rights to use the results of the project for the enhancement of EIT Food and the EIT Food Partners, for example for use in scientific papers and benchmarking. Such access rights shall include the right to grant sublicenses.* This may obviously impact a commercialisation strategy that would be based on a stricter and more limited scheme of Access Rights.

For clarification: in the case of FRM1 revenue sharing, the targeted 35% Financial Return may not be reached during the maximum 4 years. In that case EIT Food has the right to claim additional access rights, unless the exploiting party/parties decide to pay an additional amount to EIT Food to reach the targeted ROI (of 35%).

## Evaluation of the Financial Return Mechanism

The commercialisation strategy and proposed Financial Return Mechanism are key components of the proposal. It is, therefore, a very important element of the proposal and sufficient efforts must be made at the proposal stage to present a credible, ambitious and competitive financial return to EIT Food, see also the [Evaluation Criteria](#). Compulsory information related to the Financial Return Mechanism must be completed upon proposal submission and submitted by the 'exploiting party or parties' who will commercially exploit the 'Key Exploitable Result(s)' that result from the Activity. A proposal template is foreseen for the Commercialisation Strategy and Financial Return Mechanism.

## Financial Return Mechanism Agreement

Agreements with the consortium Parties on the FRM will be formalised with EIT Food after proposal selection. A standard Financial Return Mechanism Agreement (FRMA) including a FRM Term-sheet which specifies the agreed FRM, shall be signed with the exploiting party/parties of the consortium, on behalf of all of the members of the consortium. The FRMA must be agreed upon and signed by the exploiting party/parties and EIT Food as a mandatory condition for funding.

The process for concluding the Financial Return Mechanism Agreement with Term-sheet is as follows:

- A Financial Return Mechanism Agreement (FRMA) will be signed between EIT Food and the exploiting party (or parties) of each Activity. The terms of the FRM will be documented in a Term-sheet as an attachment to the Financial Return Mechanism Agreement. The FRMA should be signed before the Activity commences.
- The FRMA template, including the framework of the Term-Sheet shall be based on the described principles (adapted to each type of FRM) and will be published in EIT Food Plaza.
- By default, the FRMA will be signed by a single exploiting party on behalf of the consortium. As an exception, in case multiple KERs are to be exploited by multiple exploiting parties (not applicable to FRM2), the signature of multiple FRMAs and Term-Sheets (one per Exploiting Party) may be negotiated as an exception to the rule. The same FRMA rules as per chosen Financial Return Mechanism will apply.



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## Annex 2: Innovation Focus Area Challenges

### 1 Protein Diversification

#### INTRODUCTION AND AMBITION

Protein diversification requires shifting away from an over-reliance on resource-intensive animal proteins and moving towards lower-impact protein ingredients and a greater variety of products. To achieve this EIT Food facilitates developing and adopting diversified protein-based solutions, which are healthy, sustainable, appealing, and affordable. The provision of balanced proteins from alternative and animal sources is key to future food security.

**Call 2023 Ambition:** We seek projects developing solutions that produce new raw materials and end-products, optimize production processes, create affordable alternative protein choices, and that grow consumer awareness and trust in alternative proteins. Solutions may address a.o. proteins originating from plants, (micro) algae, fungi, single cell/biomass fermentation, cultivated meat, and insects (for feed purposes).

#### FRAMEWORK AND SPECIFIC CHALLENGES FOR OPEN CALL 2023

##### Challenge 1: Protein sources and raw materials

Evaluate and develop novel alternative protein raw materials and ingredients that are affordable, healthy, sustainable, and efficiently produced. Move away from ingredients with a low protein yield, expensive inputs, low nutritional value or limited feedstock availability. Consider also

valorization of side-streams to drive positive environmental impact, reduction in CO<sub>2</sub>, water and energy consumption and / or reduction in food waste and food loss.

### **Specific challenges for Open Call 2023**

**1.1.a Novel protein sources and raw materials to diversify the alternative protein landscape for food and feed products**

**1.1.b Increase the protein content and/or nutritional value of alternative protein raw materials**

**1.1.c Reduce barriers to and costs of expensive cell culture inputs (e.g. media, scaffolds, cell-lines) to generate products containing alternative sources of proteins**

### Challenge 2: Process optimization

Develop scalable and efficient production and processing of alternative proteins and manufacturing of consumer end-products. Facilitate upscaling and implementation in production environments, while reducing complexity and costs. Creation of solutions to remove roadblocks to the adoption of new processes also are included.

### **Specific Challenges for Open Call 2023**

**1.2.a Remove barriers to upscaling technologies for production and processing of alternative protein solutions**

### Challenge 3: Product development and quality

Develop a diverse selection of enjoyable consumer end-products using alternative proteins, including hybrid-products. Consumers expect the same qualities as traditional protein, but the experience of alternative protein products may disappoint. While navigating significant regulatory constraints and a complex supply chain, the sector needs also to address the sensory experience (texture and smell), the nutritional value and product safety (e.g.allergenicity) of end-products.

### **Specific Challenges for Open Call 2023**

**1.3.a Solutions to improve the sensory and texture experience of alternative protein products**

Cross-cutting emphasis on co-creation methodologies with consumers.

### 1.3.b Address the low nutritional value of alternative protein products

#### Challenge 4: Consumer acceptance

Improve consumer acceptance of alternative protein products. Generally, alternative protein products can be too expensive to achieve wide ranging popularity, and often contain many complex ingredients which are unfamiliar and may be off-putting to consumers.

#### Specific Challenges for Open Call 2023

1.4.a Find ways to overcome low consumer acceptability of alternative protein products (e.g. simplify ingredient list – cleaner label)

## 2 Sustainable Agriculture

### INTRODUCTION AND AMBITION

In order to meet the sustainability requirements of the European Commission's Biodiversity and Farm to Fork strategy, we need to support European farmers by co-creating climate-neutral, fair, resilient, and economically viable agricultural practices and production systems. Ultimately, these will constitute the basis of a resilient and robust agri-food supply chain.

**Call 2023 ambition:** We invite proposals providing solutions to reduce the agricultural system ecological footprint and its impact on human health. The aim must be to optimise the use of inputs and strengthen the resilience of the European food system, particularly concerning climate change and the dependency on fossil fuels and imported inputs.

### FRAMEWORK AND SPECIFIC CHALLENGES FOR OPEN CALL 2023

### Challenge 1: Reducing the use of natural resources

Reduce the demand for natural resources in agriculture, including for water, land, soil, and substances that are harmful to biodiversity. This can be addressed by improving traditional farming practices, developing new farming systems, reducing crop loss or waste from farming practices, and using natural resources in a less wasteful manner.

#### **Specific challenges for Open Call 2023**

##### **2.1.a Improve traditional farming practices**

Integration of multiple traditional farming practices to create multiplicative value and improve them via techniques such as remote sensing, cover cropping and non-synthetic alternatives.

##### **2.1.b Develop new farming systems (e.g. vertical or precision)**

##### **2.1.c Avoid waste of natural resources**

### Challenge 2: Sustainable and safe crop yield optimization

As populations grows, we need to find ways to produce more food, with less resources in a more sustainable way. Solutions addressing this issue must contribute to achievement of net zero food systems while being safe for human health and having a low ecological footprint. This challenge can be addressed through improved production and control systems (e.g. digital farming techniques, crop yield modelling), controlled environment farming and regenerative agriculture techniques and practices (e.g., multi-species cover crops, integrating animals and crops, or developing biofertilizers and biopesticides).

#### **Specific Challenges for Open Call 2023**

##### **2.2.a Improved production and control systems**

##### **2.2.b Controlled environment farming**

##### **2.2.c Reduce pesticides and fertilizers and develop biological alternatives**

### Challenge 3: Sustainable and safe livestock production

We are looking for solutions for livestock production with reduced greenhouse gas emissions and fewer harmful impacts on human or planet health. This issue could be addressed by active control of inputs, outputs and waste (e.g. via precision farming techniques), by developing circular farming systems and by reducing the use of antibiotics and developing alternatives to these.

#### **Specific Challenges for Open Call 2023**

**2.3.a Develop active control systems for inputs, outputs and waste**

**2.3.b Develop circular farming approaches**

**2.3.c Find ways to reduce antibiotics / develop biological alternatives**

### Challenge 4: Resilient and robust agricultural systems and supply chains

Enhancing resilience, by reducing the dependency of European agriculture on energy, energy intensive imports and feed imports is more necessary than ever. The goal is to improve the resilience and robustness of agriculture and supply chains to challenges of energy security, fossil fuel dependency (e.g., in fertilizer production), climate change (e.g., floods and droughts), the threat of large-scale disease and pestilence outbreaks and food safety hazards.

#### **Specific Challenges for Open Call 2023**

**2.4.a Find ways to optimize crop resilience**

**2.4.b Reduce use of fossil fuels in food system inputs (e.g. fertilizer production)**

High and fluctuating prices of fossil fuels and doubts over their future availability mean that agriculture needs to reduce its dependency on these.

## 3 Targeted Nutrition

### INTRODUCTION AND AMBITION

Unhealthy diets and physical inactivity are among the leading causes of NCDs (Non-Communicable Diseases) and contribute significantly to the global burden of malnutrition in all its forms. The challenge is to transform the food system to support the reduction in the relative risks of obesity, non-communicable diseases, and malnutrition of targeted populations exposed to known dietary factors. Solutions are urgently needed and we need to be part of this change.

**Call 2023 Ambition:** We invite proposals that support the reduction of the incidence of non-communicable diseases in targeted populations, the promotion of healthy aging and the reduction of malnutrition in vulnerable populations.

### FRAMEWORK AND SPECIFIC CHALLENGES FOR OPEN CALL 2023

#### Challenge 1: Healthier Ingredients and products

Create desirable and healthy ingredients and products with lower sugar, salt and fat that are just as tasty and no less affordable as the conventional choice and offer a great consumer experience.

#### **Specific challenges for Open Call 2023**

##### **3.1.a Create healthier substitute ingredients**

##### **3.1.b Make a broad range of healthy products available for people of all ages and in all channels (including out of home)**

Having an established supply chain for healthy products, including availability in retail chains, will enable an easy way for sustained availability of health products across several channels (emphasis is on the retail adoption of healthy products)

#### Challenge 2: Processing technologies for healthier product

Develop food processing technologies that enable the production of healthier and more affordable products. This might involve reducing the quantity of harmful substances in foodstuffs or decreasing the costs of healthier foods

**Specific Challenges for Open Call 2023**

**3.2.a Develop processing technologies (such as fermentation and other traditional processing methods) that can improve nutritional parameters in food products**

**3.2.b Develop processing technologies that reduce the cost of healthy products**

Affordability is a key element for achieving targeted nutrition solutions (example, implement existing technologies for preserving organoleptic and nutritional characteristics of food)

Challenge 3: Use science to improve health and nutrition

Use science and technology to enable better diagnostics of human physiology and highly personalised nutritional tools and advice that will help avoid and mitigate a range of diseases. Solutions in this space include nutritional biomarkers, microbiome indicators, nutritional genetic indicators, or solutions that use a mix of these technologies. Any solutions in this space will need to be substantiated and validated, go through appropriate regulation and be affordable.

**Specific Challenges for Open Call 2023**

**3.3.a Develop and apply substantiated and validated nutritional biomarkers**

Measurement of molecular and/or microbial analytes from blood (example, development of non-invasive sensors (urine, saliva or sweat) with higher precision)

**3.3.b Develop affordable diagnostic solutions using multiple biomarkers and indicators**

Challenge 4: Consumer empowerment tools for all

Support consumers to make long term healthy changes to their eating behaviours, through e.g. rewards, incentives, education, improved labelling, and personalised nutrition guidance. Empowering behaviour change is challenging as diets are situation dependent, socially determined, difficult to measure, and change is hard to sustain over time.

### Specific Challenges for Open Call 2023

#### 3.4.a Develop integrated personalized predicted models to drive consumer behaviour change for healthier nutrition / guidance for consumers and Health Care Professionals.

Provide consumers with individualized dietary behavior change that result in measurable health benefits (example, tools that aim to help consumers take on healthy and safe habits).

## 4 Sustainable Aquaculture

### INTRODUCTION AND AMBITION

Aquaculture plays a crucial role in global food security and nutrition. However, its production and distribution still face many challenges. In the next ten years, aquaculture must expand sustainably to provide healthy and nutritious food for a growing population, while generating new sources of income and employment or securing existing ones. It must also be environmentally, socially and economically sustainable, while minimizing impacts on ecosystems, ensuring social equality and responding to the consequences of climate change.

**Call 2023 Ambition:** We invite proposal that support the transformation and expansion of current aquaculture sector into a sustainable form of food production, reducing food system climate change footprint, ensuring food security & safety and enabling transition to a circular economy through capacity building.

## FRAMEWORK AND SPECIFIC CHALLENGES FOR OPEN CALL 2023

### Challenge 1: Optimise existing production systems

Existing aquaculture systems could be optimised to help us achieve our sustainability goals, not only in making them lower impact, but also using them as a more sustainable source of food than conventional land systems. Moreover, we could reduce reliance on imported seafood. There are many operational challenges in transforming existing systems.

### **Specific challenges for Open Call 2023**

**4.1.a Develop automated production control systems that self-optimize and ensure traceability**

**4.1.b Identify/develop sustainable inputs and outputs (including feed stock, energy and genetics)**

### Challenge 2: Develop new farming systems

There is huge potential for aquaculture systems and new species to provide a significant proportion of future sustainable food. These new systems and new species will need to be more sustainable and more scalable than existing systems and will probably integrate with or contain other systems adding to operational complexity.

### **Specific Challenges for Open Call 2023**

**4.2.a Develop new and novel sustainable and highly scalable production systems (including sustainable inputs & outputs)**

**4.2.b Create new foods from aquaculture (e.g. micro & macro algae, new species, etc)**

**4.2.c Develop circular/closed and integrated production systems (e.g. aquaponic or IMTA systems) that result in multiple outputs with limit water use and without waste**

### Challenge 3: Maintain and improve ecosystem health

Aquaculture production systems are often either directly integrated with the natural environment or operate in close proximity to it and we need to avoid any negative impacts on it.

### Specific Challenges for Open Call 2023

4.3.a Identify/develop solutions to reduce negative and increase positive impacts on the ecosystem while also improving resilience to climate change

4.3.b Develop sustainable and low-impact disease control strategies (prevention & control) while ensuring animal welfare

### Challenge 4: Improve supply chain for safety, quality and sustainability

Changes could be made across the food supply chain to make it traceable, safer, more sustainable and less wasteful. These challenges range from reducing spoilage to full traceability all the way through to the consumer.

### Specific Challenges for Open Call 2023

4.4.a Identify/ develop solutions to improve seafood safety & quality across supply chain including using and adding value to waste

## 5 Digital Traceability

### INTRODUCTION AND AMBITION

Food traceability refers to a system that allows end-to-end tracking of food from production to consumption and is key for ensuring safety, quality and transparency across the food supply chain. Digitalisation can provide solutions for increasing the efficacy and capacity of traceability systems and can contribute to a better coordination among the different food-chain operators.

**Ambition:** Our mission at EIT food is to promote digitalization of traceability as a key enabler of the digital transformation of the food system, enhancing food safety, efficiency, sustainability and increasing transparency and fostering consumer trust.

### FRAMEWORK AND SPECIFIC CHALLENGES FOR OPEN CALL 2023

Challenge 1: Improve safety and quality monitoring across the food supply chain

Support food system actors to ensure end-to-end food safety and quality by introducing new forms of supply chain monitoring and control. Solutions must be rapid and precise, hard to circumvent or falsify and coordinated across the food chain. Solutions must also be minimally invasive, non-disruptive for the supply chain and environmentally friendly

**Specific challenges for Open Call 2023**

**5.1.a Develop rapid and precise detection methods for safety/ quality monitoring and risk assessment throughout the food supply chain**

**5.1.b Limit supply chain fraud and false legitimization**

**5.1.c Increase coordination of responses to safety hazards**

Challenge 2: Develop modelling and forecasting methods to enhance supply chain management

Improve modelling and forecasting across the food chain. Digital infrastructure and modelling have to be improved to coordinate supply chain actors, increase the efficiency of food processing and better match demand and supply across the food chain.

**Specific Challenges for Open Call 2023**

**5.2.a Build digital systems to increase coordination of supply chain operators as well as demand/supply modelling and forecasting**

**5.2.b Create models to improve processing efficiency (including energy and waste reduction)**

**5.2.c Develop technologies to evaluate and track product shelf-lives to reduce food waste**

Challenge 3: Create tools to detect environmental impact of the food chain

Develop tools to monitor the environmental impact of complex food systems and supply chains. These tools should be developed to complement existing and future environmental standards and should be quick and simple to use to facilitate acceptance and adherence from food chain operators.

**Specific Challenges for Open Call 2023**

### 5.3.a Generate quick, simple and scalable tools to assess environmental impact

#### Challenge 4: Increase consumer trust in food traceability

Enhance consumer confidence and build trust in their food and its provenance through improved digital traceability. Supply chains are currently very complex and too opaque for consumers to trust the products they are eating. This could be addressed through improved food labelling – both in terms of clarity and reliability, as well as by empowering consumers to independently assess product shelf-life.

#### **Specific Challenges for Open Call 2023**

**5.4.a Develop tools to facilitate the integration of traceability information for a clearer and more reliable food labelling system**

**5.4.b Propose solutions to empower consumers to track product shelf life**

## 6 Circular Food Systems

### **INTRODUCTION AND AMBITION**

We must cut out waste at all stages of the food value chain by accelerating the transition to a circular & sustainable food system in which food is cultivated, processed, transported, prepared and by-products managed in ways that benefit the health of people and natural systems. Food is designed to cycle, so the by-products (side and waste streams) are reduced to the minimum and what still remains is re-utilised. Resources are re-used and nutrients recycled, as a result natural systems regenerated and GHG emissions as well as water and land use reduced. Consumers and value chain stakeholders are key enablers of this transition.

**Call 23 ambition:** We invite proposals that are based on a food systems approach to address value-chain pain points in order to enable: a) optimal resource use and mitigate food loss and waste; b) valorization of side and waste streams; c) development of sustainable packaging systems that support packaging recyclability and reuse; 4) enabling a waste behaviour change both across supply chain stakeholders and consumers. Potential solutions may include training/education actions for e.g., retailer and/or consumers.

### **FRAMEWORK AND SPECIFIC CHALLENGES FOR OPEN CALL 2023**

#### Challenge 1: System optimization for waste reduction

Much of the waste in the existing food system is as a result of production not being fully utilised or being spoiled before it is consumed. The existing food system could be adapted to better match production with demand and avoid spoilage.

#### **Specific challenges for Open Call 2023**

**6.1.a Develop approaches across the value chain to prevent over-production**

**6.1.b Develop sustainable preservative systems to avoid spoilage (e.g. create optimal and sustainable preservation technologies, natural and environmentally friendly preservative alternatives)**

#### Challenge 2: Waste and side stream valorization

There are side and waste streams across the food system which could be better valorized either directly as food, transformed into a new higher value product or re-used within the system.

#### **Specific Challenges for Open Call 2023**

**6.2.a Develop methods to sustainably dispose or reintegrate waste / side streams back into the system**

**6.2.b Create new processing technologies to transform waste into healthy food or feed products and raw materials**

#### Challenge 3: Sustainable packaging systems

Many existing packaging systems result in avoidable non-recyclable waste. We could develop new approaches to packaging that help avoid spoilage, aim to completely eliminate non-recyclable waste and support packaging reuse.

#### **Specific Challenges for Open Call 2023**

##### **6.3.a Develop reusable and high-quality recyclable packaging systems**

Develop packaging that is either reusable or can be recycled in a cost-effective manner. Design and production of packaging to allow high recycling rates.

##### **6.3.b Develop sustainable and affordable packaging systems with enhanced food preservation abilities**

Including biodegradable food packaging that are supported by adequate waste collection and treatment as well as clear labelling for consumers.

#### Challenge 4: Waste behaviour change

A lot of food material is wasted across the value chain because it is purchased when not really needed and is not used before it spoils. We could find ways to change behaviour so that food is only sold and/or purchased when needed and not thrown away when it is still good for consumption.

#### **Specific Challenges for Open Call 2023**

##### **6.4.a Develop ways to avoid food materials being thrown away and/or over purchased across the supply chain and by consumers.**